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INFORMATION REPORT

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CENTRAL INTELLIGENCE AGENCY

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COUNTRY
Hungary

SUBJECT
Gheorghiu Dej Shipyard / Freighters for USSR and Red China / Sea-going Cranes / Soviet Instrumentation / Soviet Marine Inspection

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SUPPLEMENT TO REPORT #

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1. The Gheorghiu Dej Shipyard (47°32' N/19°04'E), in Budapest XIII, is located on the east bank of the Danube River, sheltered by an island used for publi 25X1 recreation. Its waterfront is really a bay, since the only navigable access to it is from the south. Just north of it, on the same side of the Danube, is what is known as "New Pest," while on the west bank lies "Old Buda," which in the days of the Romans was known as Ancient Aquincum. These two areas are connected by an east-west railroad bridge, one portion of which crosses the island. Access to the island is by ferryboat that plies between its southerly tip and the east bank of the river. The shipyard itself extends roughly from where the railroad bridge crosses the bay to a point opposite the southern end of the island, 25X1 to be about one mile.

sketch of the plant layout, but it is not to scale,

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(See sketch at end of paragraph 8.)

2. Gheorghiu Dej Shipyard comes under the authority of the Ministry of Heavy Industries. Its population numbers about 4 thousand persons, including 5 to 600 whitecollar individuals. The direction of the yard is headed by a general manager, followed by a technical director. Under the latter come three chief engineers: one for machinery, one for construction, and one for electrical equipment. As of my departure in September 1957, the general manager was Stevan Kiss, a member of the Communist Party, who had formerly been a welder, but was quite intelligent and a good administrator. The technical director then was one Joseph Paal, likewise a CP member, who was a trained engineer. None of the three chief engineers was a party member, although there was always pressure on them to join. What it amounted to was that their skills were so in demand that they were needed whether in the party or not.

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3. considering the immediate future possibilities of the shipyard operations, the three chief engineers are the three key technical men in the place.

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[redacted] 25X1

4. The best workers at the yard earn 2 to 3 thousand forints a month, with less skilled around 14 to 15 hundred. A normal work day is from 0700 to 1600 hours. Some of the areas worked two shifts; a three-shift operation would be quite unusual. [redacted] the yard capacity, providing materials were always 25X1
available when needed and the personnel really worked on a two-shift basis, would amount to about twelve 11,000-M/ton ships a year, four 100-ton sea-going floating cranes, and perhaps twenty smaller (5-ton) cranes such as grab-cranes used for transferring cargo from one ship to another. [redacted] 25X1

[redacted]

5. Products of the yard include ship hulls, machinery equipment for cranes, welded parts, castings, foundations for cranes, piping, and the like. [redacted] 25X1
[redacted] designed and built our own switchboards, items like motors and generators were bought from the Ganz motor works. In addition, about 10% of the yard's 25X1
production was for other industries, especially foundry and constructural items like large transformer containers. [redacted] five or six years ago, part of the plant on the landward side was separated from the ship- 25X1
yard proper, and today it produces land-based cranes. [redacted] the separation was effected in order to provide some worthy CP hack with a top managerial post. 25X1

6. Actual production at the yard is difficult to estimate for several reasons, regardless of what the plan may call for. One of these is the disinclination of the workers to do their best, for this slows down output and forces the management to order overtime operations, and consequent higher pay. Another is that material shortages are a chronic obstacle. The worst ones usually involve steel sheets. Then there is the matter of wood, all of which is imported, mostly from Rumania. But other items frequently disrupt an entire production 25X1
schedule, and at one time [redacted] short on lead-covered cable for two months because of a breakdown in the only plant in Hungary that produced it. This plant was the former Feltin & Guillaume, now called the Electric Machine and 25X1
Cable Factory, which is an amalgamation with the former local Siemens plant. [redacted] something is always lacking, and the general manager spent a large part of his time rushing about to various suppliers begging and bribing for shipments.

7. Operations at the yard were partly mass assembly and partly sub-assembly as to techniques, depending on the items required. When [redacted] running a dozen 25X1
identical hulls at once, mass production was attempted as far as possible. Incidentally, all our ships were welded, not rivetted, [redacted]
a big advance for Hungary. 25X1

8. Ship launchings were done sideways, as the bay was too narrow for ordinary launching. The ships were built end to end along the bay, and slid sideways into the water. They were held by chains from the ships to pylons, and released on signal. Sometimes, if the ways were not sufficiently greased for gravity launching, they had to be cranked down to the water. Otherwise, there was nothing unusual about this. Having been launched, if they were sea-going types the many low Danube bridges required that the superstructers be put in the holds and not assembled until they had been taken down to the sea. Also, at times the Danube draws so little water that deliveries can be held up for months; ordinarily, one can expect a usable depth of 3 to 4 meters.

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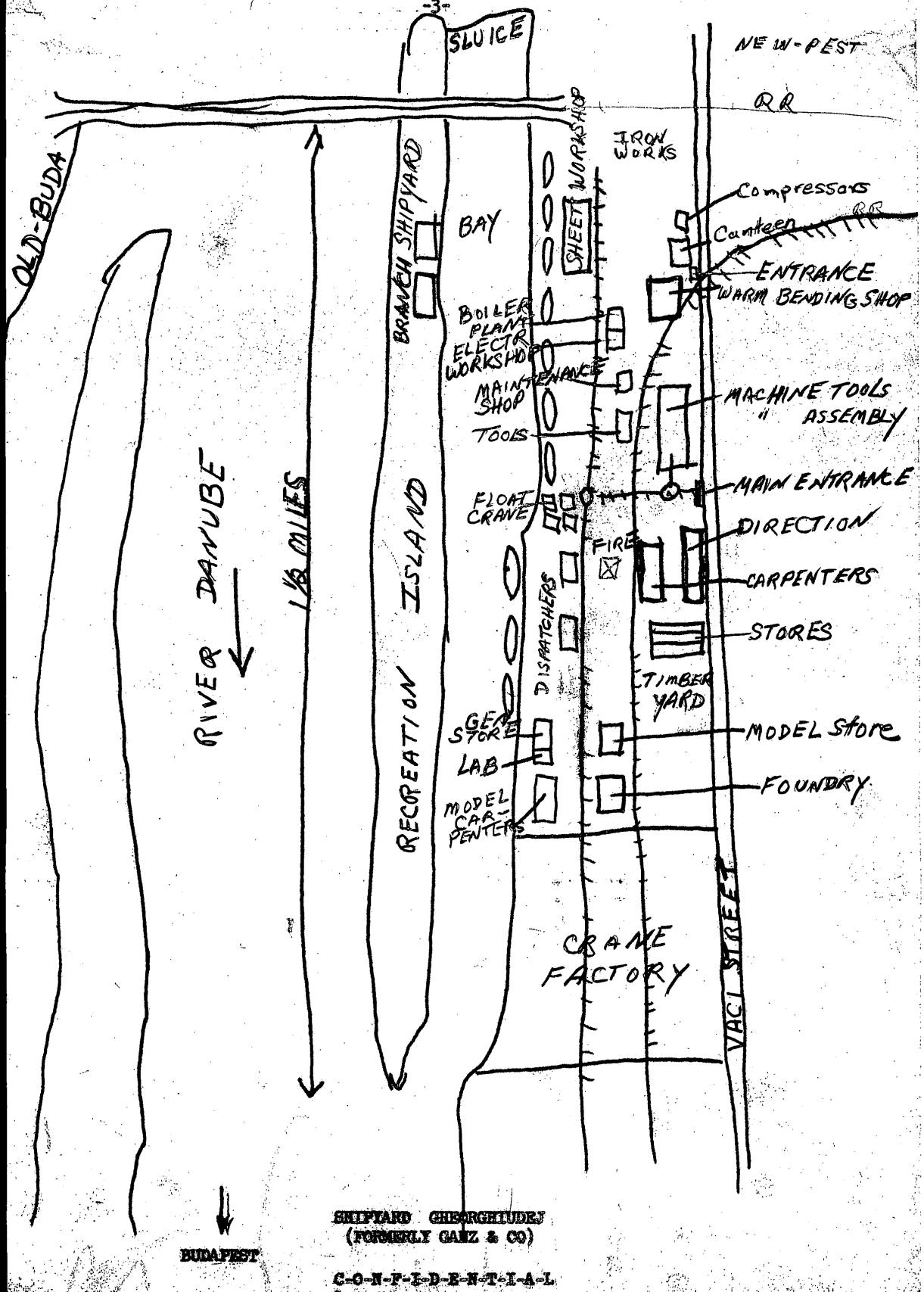

SHIPYARD CHEORGHIUDEJ
(FORMERLY GANZ & CO)

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9. The Soviet connection with operation of the shipyard is (or at least was) maintained through personnel of the Soviet sea registry. This organization has an office in Budapest manned by a number of young engineers and tehhnicians called "surveyors," whose job it is to check on the technical progress of ships and cranes being built for the USSR. In point of fact, as far as electricity was concerned, these youngsters knew 25X1 almost nothing about what was involved. Besides this group, the Soviets also had a Budapest office for their importing organization, and members of this shop had the responsibility of monitoring the commercial aspect of anything built for the Soviets. 25X1

10. One of the first ships built for the Soviets was the "Chiaturi" 25X1 delivered in 1947, --a rather uncomfortable duty because the local waters were still full of mines. This ship was 96 meters long, 30 wide, drew 5 or 6 meters when loaded, and weighed roughly 2,300 M/tons. She was a diesel-electric vessel, 25X1 the Soviets had built passenger cabins into her for service in the Black Sea and occasionally in the Adriatic.

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11. Prior to this, in 1956, produced for the Poles a 1,000-M/ton 600-passenger vessel which they named the "Maszowsze," and which they used as a workers' holiday ship operating out of Gdansk along the Baltic.

12. In 1947, Gheorghiu Dej began delivering to the Soviets a series of cargo ships 25X1 that had been originally designed about 1938 for Hungarian trade with the Near East; the idea was to make Budapest itself an "inland seaport." The prototype of this boat was called the "Tisza," after a Hungarian river, particular boat is probably still in use. Although somewhat modified by the Soviets to make them more seaworthy (higher superstructure, for example,) the 25X1 same basic hull design was used, and called them all Tiszas. In any case, between 1947 and September 1957, the yard made between 80 and 90 Tiszas for the Soviets. They took about 8 months to build, and launched about one a month. These, with superstructure packed in the hold, were delivered to Braila, Rumania, where 25X1 the superstructure was added and the ship fitted for sea. Deliveries to the Soviets were due to terminate in the summer of 1958.

13. The Tisza is a cargo vessel of 1,100 dead weight metric tons. She is 73 meters long, 10 wide, 10 high, and loaded draws about 4½ meters. Empty, but with superstructure stowed in the hold, she draws 2.8 meters. Manned by a crew of 28, the Tisza's pilot house and machinery are aft, with three main holds divided in the center for cargo control. She is powered by two 400HP diesels, designed by the late Hungarian engineer, Jendrassik, and her twin screws give her a speed of 9½ knots loaded. Her fuel endurance is between 2 and 3,000 miles.

14. Tisza equipment includes six electric cranes, each having a 2-ton capacity, and one big boom for 10 tons. There is no other special equipment The Soviets add their own wireless 25X1 put in German or Swiss chronometers, Hungarian sextants, and Soviet electrologs, magnetic compasses, and fathometers. All these instruments were very simple. For example, the fathometers were indicating, but not recording instruments. Their dial registered from zero to 400 meters; this was a circular dial, a rotating disk with a flash lamp that lighted a certain point on the 25X1 dial to indicate depth. In the hold, built an oscillating box before launching. On the whole, this instrument had an accuracy of between 1% and 2% when it worked. The trouble was that the radio tubes were of such poor quality that they had to be replaced frequently. 25X1

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15. The price of the Tisza was around US$ 240 thousand. The first 25 units or so went to the Soviets as war reparations, after which they paid 60% of the cost, with the Hungarian Government paying the remaining 40%. The whole transaction was really a bookkeeping proposition, since payment was in imports from the USSR. the Tiszas to be one of Hungary's best export items, and only the Gheorghiu Dej yard made them. As for home deliveries, two Tiszas were sold to the Hungarian Navigation Company, and as of 1956 this organization was to receive one unit a year. 25X1

16. With each Tisza delive UNCODED ad to supply a "guarantee mechanic" to go along and spend a year aboard. When these returned learned what little know about the ships and their use. whereas some units were kept in the Black Sea for general cargo, most of them were taken to the orient, where they served to haul coal between Sakhalin Island and Vladivostok. the Soviets piled a couple on the rocks somewhere, and lost them). these vessels were not suitable for naval tenders, at least not as tankers, although they could be so used if the liquids were in sealed barrels. 25X1 25X1 25X1 25X1

17. The Chinese Communists got a few Tiszas, probably not more than four. although they bought three copies each of several hundred drawings about three years ago. the Chinese never said anything. If they had tried to use these drawings to build their own Tiszas we would have heard plenty of complaints, unless national pride made them keep quiet about it. the export Tisza program to the Soviets was due to halt during mid-1958, and to my knowledge there were no plans to make any for the Chinese. 25X1 25X1

18. The Soviets, however, want more cargo ships from Gheorgiu Dej. In April 1956, a Soviet technical commission arrived in Budapest and started negotiations for the production of a larger, more powerful vessel. They had visited various shipyards on the Continent, and knew pretty much what they wanted. They then decided would do the building, quite evidently without considering the difference in quality and capabilities between our yard and those of the West. Their purpose was to get something better than the Tiszas, which were pretty obsolete by then. They wanted it a little larger--about 1,400 M/tons--and they wanted it to have a speed of 14 knots, which called for two diesels of 800 HP each. They had even decided on the engine they wanted: another Jendrassik design, of which, only a prototype had been built and which so little about that it would take us months to produce a single one, if could do it at all. 25X1 25X1 25X1

19. The contribution to this new boat called for using the most recent West German developments in marine electrical equipment, and on this the Soviets insisted. no experience whatever with such developments, and could not hope to give them what they wanted. refused to sign their contract (the other two chief engineers were also to be signers), and only after the management advised that if did not sign they would be forced to "get somebody who will," did do so. hate to think what the outcome of that effort will be--when left in September, the whole matter was still being worked out on the drawing boards, and if they meet a delivery schedule of one unit by the end of 1958 it will be a miracle. they can do it, but if they do launch something there will be a lot of nervous people aboard for sea trials. This ship, incidentally, is to have all Soviet equipment. 25X1 25X1 25X1 25X1

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20. Another major production item of the Gheorghiu Dej yard was a 100-ton seagoing floating crane. Of these, about 25 have gone to the USSR, one to Bulgaria, one to Yugoslavia, and one to Poland. This is a very versatile, rotating crane, used mainly for heavy freight and for harbor construction. In 1948, [redacted] went to Neverossisk, on the Black Sea, to set it up. Its purpose was to reconstruct the badly-damaged harbor, and it was to be used to lift huge concrete blocks for the mole. 25X1

21. The 100-ton seagoing crane is equipped with one 100-ton hook and one 25-ton hook; the latter moves four times faster than the former. There are four 100-HP electric DC motors aboard, one each for the two hooks, a third for hauling the jib, and the fourth for turning the crane on its axis. In addition, each of the crane's two screws is driven by a 120-HP motor that gives the crane a forward movement of about 5 knots in still water. All these motors are supplied by two 180-HP diesel generators, and are so hooked up that the crane operator can work two motions at the same time. There are two operating cabins, one for the cranes and one for the propellers. The barge itself can be swung by manipulating two wheels in the pilot house that control the forward and reverse movement of the two props. The hull is square, and at each corner there is an anchor and jib for controlling it. The bottom is not flat: at the rear it is deeper, and at that point draws about 2 meters. The rig calls for a crew of 24 on a 3-shift basis, and in the pontoons there are accommodations for these, including bunks, a galley, hot water, and the like. Also in the pontoons are located ballast and oil tanks, and the required pumps to regulate the ballast.

22. In connection with cranes, the Soviets, had bought several hundred of the seagoing 5-ton units, but have decided they want them henceforth delivered on flatcars instead of via the Danube as previously. The reason given for this was that they want to use the new ones at inland points that call for overland delivery. [redacted] the designers were still wrestling with the problem of dividing the pontoons in such a fashion that they could be shipped by rail--the superstructure was no great problem but the platform was a headache--and the first of these was to be delivered during 1958. [redacted] the whole unit was to go on five or six flatcars. [redacted] about how many of these units the Soviets want, but presumably in the hundreds. 25X1 25X1

[redacted]

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